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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,261	01/19/2004	William Freeman	15436.121.1.1	6915

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EXAMINER

BLACKWELL, GWENDOLYN ANNETTE

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,261

Applicant(s)

FREEMAN ET AL.

Examiner

Gwendolyn Blackwell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 16-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method of making, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 18, 2006.

Claim Objections

2. Claims 1-7 are objected to because of the following informalities:

Claim 1 refers to an attenuation layer comprising a layer of at least a photopolymerizable monomer mixed with an electrolyte and an electrochromic material. Dependent claim 6 refers to the attenuation layer as comprising an electrochromic layer and an electrolyte layer coupled to said electrochromic layer. From a reading of Applicant's specification (page 6, section 018) the attenuation layer can be one layer or separate layers. Based upon the specification and the language of claims 1 and 6, the attenuation layer was interpreted as separate layers, wherein dependent claim 6 further defines the structure of the attenuation layer of claim 1

However Applicant's arguments (Response, 9/18/2006) indicate that claim 1 should have been an attenuation layer having the monomer, electrolyte, and electrochromic material mixed in one layer. If that is the case, then claim 6 cannot further limit the attenuation layer and make the layer now separate layers claimed as Applicant has indicated in the arguments (Response, pages 8-9) that the attenuation layer is one layer. Clarification is required. To further prosecution, the

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attenuation layer of claim 1 will be construed as being either one layer or multiple layers, which is consistent with the specification, and is further defined as separate layers in claim 6.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-10, 12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,668,663, Varaprasad et al.

Regarding claims 1 and 8

Varaprasad et al disclose an electrochromic device, such as a window (column 1, lines 6-11) comprised of first and second substrates positioned in a spaced apart relationship being substantially parallel. First and second conductive electrodes are positioned on the inner surfaces (the surfaces that face each other) of the first and second substrates, (columns 13-14, lines 45-41). Between the conductive electrodes, an electrochromic material layer and an electrolyte material layer (the combined electrochromic layer/electrolyte layer form Applicant's attenuation layer) are formed, (column 7, lines 53-64). The electrolyte material is comprised of redox reaction promoters and alkali ions and/or protons wherein one of the alkali ions may be lithium methacrylate (photopolymerizable element), (columns 8-10, lines 56-58), meeting the limitations of claims 1 and 8.

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Regarding claims 2-3, 5-7, 9-10, 12, and 14-15

The substrates can be formed of glass, (column 13, lines 26-41), meeting the limitations of claims 2 and 9.

The electrodes and glass substrates are transparent and transmissive in part in the visible portion of the electromagnetic spectrum, (column 15, lines 6-65), meeting the limitations of claims 3 and 10.

As light passes through the electrolyte layer, a portion of the electromagnetic spectrum is absorbed (attenuated), (columns 11-12, lines 61-8), meeting the limitations of claim 5.

Between the conductive electrodes, an electrochromic material layer and an electrolyte material layer (the combined electrochromic layer/electrolyte layer form Applicant's attenuation layer) are formed, (column 7, lines 53-64), meeting the limitations of claim 6.

The electrochromic/electrolyte layers are activated by an applied potential between the conductive electrode coatings by any source of an alternating current or a direct current (voltage), (column 23, lines 39-49), meeting the limitations of claim 7.

The electrolyte material is comprised of redox reaction promoters and alkali ions and/or protons wherein one of the alkali ions may be lithium methacrylate (photopolymerizable element) which form either a liquid or solid solution, (columns 8-10, lines 56-58), meeting the limitations of claims 12 and 14-15.

5. Claims 1-4 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 6,193,378, Tonar et al.

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Regarding claims 1, 4, 8, and 11-13

Tonar et al disclose an electrochromic device that can be a window, (column 11, lines 47-50 and column 12, lines 53-57). The device is comprised of first and second substrates with a first electrode on the inner surface of the first substrate and a second electrode on the inner surface of the second substrates wherein the two substrates are in a spaced apart relationship with an electrochromic element formed between the two electrodes, (column 3, lines 38-67).

Regarding claims 2-3, 7, and 9-10

The substrates are made of glass, (column 10, lines 17-24), meeting the limitations of claims 2 and 9.

The conductive electrodes are transparent, which would allow for the transmission of at least a portion of visible light, (column 3, lines 57-65), meeting the limitations of claims 3 and 10.

The reflectivity of electrochromic element is activated through the use of an applied voltage, (column 3, lines 37-41), meeting the limitations of claim 7.

Response to Arguments

6. Applicant's arguments filed September 18, 2006 have been fully considered but they are not persuasive.

7. Applicant contends that US 5,668,663, (Varaprasad), does not teach the structure of the attenuation layer as claimed in claims 1 and 8 as the attenuation layer is comprised a layer of photopolymerizable monomer mixed with an electrolyte and an electrochromic element.

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With regards to claim 1, this is not persuasive as claim 1 has been given the broadest reasonable interpretation based upon the specification and those claims which depend therefrom. Claim 6, requires that the attenuation layer is comprised of separate layers with the layers being an electrolyte layer and an electrochromic layer. With such an interpretation, it would stand to reason that the electrolyte layer is comprised of the electrolyte and the photopolymerizable monomer, as claim 1 indicates that the photopolymerizable monomer is mixed with an electrolyte. The electrolyte layer of Varaprasad contains a photopolymerizable monomer which could also be stated as a photopolymerizable monomer mixed with an electrolyte.

With regards to claim 8, the argument is not persuasive as it is not commensurate with the language of claim 8. There is no limitation in claim 8 that the photopolymerizable monomer is mixed with an electrolyte and an electrochromic material.

8. Applicant contends that US 6,193,378, (Tonar), teaches an electrochromic material that is not claimed by Applicant.

This is not persuasive as the entire rejection of Tonar set forth the elements of the structure of claims 1 and 8. Applicant has not established that Tonar does not teach those elements. Applicant is arguing the definition of a term outside the proper context of the entire rejection under Tonar. The electrochromic solution, which should have been the electrochromic material, is:

The electrochromic element is comprised of an electrolyte and an electrochromic medium, (column 4, lines 46-67). The example demonstrates that the electrochromic medium also contains polymethylmethacrylate (photopolymerizable monomer), (column 10, lines 32-37), meeting the limitations of claims 1, 4, 8, and 11-13.

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The electrochromic elements is a mixture of the electrochromic medium, electrolyte, and photopolymerizable monomer , which are the same the elements of Applicant's attenuation layer.

9. For the reasons set forth above, the rejections of claims 1 and 8 are maintained. As Applicant only argued against claims 1 and 8, the rejection of dependent claims 2-7 and 8-15 are maintained.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell whose telephone number is (571) 272-1533. The examiner can normally be reached on Monday - Thursday; 6:30 am - 5:00 pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gwendolyn Blackwell
Examiner
Art Unit 1775


gab


JENNIFER MCNEIL
SUPERVISORY PATENT EXAMINER
11/24/06